



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

"On two new Minerals from Chester Co." By Isaac Lea, LL. D.

Prof. Cope exhibited several vertebræ of a Gavial from the cretaceous marl of Burlington Co., N. J., and proposed for the new species the name of *Thoracosaurus brevispinus*.

A letter was read from George W. Tryon, Jr., offering his collection of Shells to the Academy on certain conditions, which, on resolution, were accepted. The collection consists of over 10,000 species, in addition to 100 jars of alcoholic specimens, mainly of naked mollusca. The collection is particularly rich in recently described species.

April 16th.

The President, DR. HAYS, in the Chair.

Thirty-eight members present.

The death was announced of Dr. C. W. Pennock, on the 14th inst., a member.

April 23d.

The President, DR. HAYS, in the Chair.

Thirty-three members present.

The following was presented for publication:

"A third study of the Icteridæ." By John Cassin.

The death was announced of Mr. Samuel C. Morton, a member.

April 30th.

The President, DR. HAYS, in the Chair.

Thirty-three members present.

The following were elected correspondents:

Col. F. F. Cavada, U. S. Consul at Trinidad; Eugene Gaussoin, of Baltimore; Alpheus Hyatt and F. W. Putnam, of Salem, Mass.

The following were elected members:

Wm. Hay, James H. Little, Beauveau Borie, J. Ross Snowden, Wm. W. Keen, Jr., M. D., Edward J. Nolan, M. D., Charles Magarge, Charles S. Coxe, Isaiah V. Williamson, Matthew Baird, Charles Wheeler, Robert H. Gratz, Adolph E. Borie, H. Pratt McKean, Geo. F. Tyler, Wistar Morris, Joseph F. Page, Israel Morris, A. Campbell, Thomas A. Scott, H. H. Houston, Charles Spencer, Gustavus S. Benson, Wm. A. Blanchard.

On favorable report of the respective Committees, the following were ordered to be published:

On EUCLASTES, a genus of extinct Cheloniidæ.

BY E. D. COPE.

This genus is established on a species represented by a single imperfect cranium, procured by Thos. Heritage from his marl excavations near Hurffville, in Camden Co., N. J. The matrix in which it is preserved is very simi-
1867.]

lar to that near Vincenttown, in which the cranium of the *Thoracosaurus neocæsariensis* was discovered, being a coarse granular limestone in many places, with numerous black rounded grains of perhaps phosphate of iron or hornblende. It is abundantly penetrated by *Teredo tibialis* Mort., contains *Gryphaea vomer* abundantly, and has afforded the only specimen of *Aturia* from the eastern cretaceous beds, which I have called *A. paucifex*.* The bed is but a few inches thick, and is frequently interrupted, and is over and underlaid by the green sand of Cook's middle bed.

The physiognomy of this large turtle, in the obliquely expanded zygomata and short muzzle, is like the *Pleurodire* genera *Podocnemis* Wagl. among recent *Chelonia*, and *Bothremys* Leidy, of the same age, among extinct forms. Its completely overarched temporal fossæ add to the impression of its affinity to the former genus, but on inspection of the vomer, it is found to be, as in the true *Cheloniidæ*, largely developed on the palatal surface between the o. o. maxillaria, and to extend to a posteriorly situated nareal opening. Though this element is unossified in the *Chelonioid* types of *Pleurodira*, *Peltocephalus* and *Podocnemis*, it is well developed in the family *Chelydridæ* (Agassiz), and the peculiarity of the cretaceous species might still exist in this sub-order. As it is a matter of much interest to determine the precedence in time of the two sub-orders of *Chelonians*, I have taken pains to remove the matrix from the orbital and nasal cavities, so as to determine the structure of the prefrontal bone. As I have elsewhere pointed out, this sends downward a column to the vomer, either vertically or directed obliquely inwards, in all the *Cryptodira*, while in the *Pleurodira* the column is wanting.

It might be reasonably anticipated that, in the period of the Cretaceous, the less typical sub-order now characteristic of the Southern Hemisphere would abound, if not entirely prevail. Its genera occur in the different epochs of the Jurassic period, and Prof. Agassiz suspects one, at least, of the Cretaceous *Chelonianæ* of Europe to be really *Pleurodire*. The species herein described, however, I must refer to the true *Cheloniidæ*, and consider it as an undescribed genus, having marks of resemblance to the *Trionychidæ* and *Hydraspididæ*. It differs from *Chelonia* in its large naso-palatal foramen, thus resembling *Trionyx*, in the complete flooring of the nasal meatus by the vomer and palatines as far back as the line of the inferior openings of the orbits, and by the shallowness of the palate and slight development of the alveolar margin.

The diagnosis will be as follows: that of *Bothremys* a *Hydraspid*, which has furnished the only other cranium from the same formation, is introduced. It also has the vomer osseous, extensively in contact with the maxillaries on the palatine surface.

BOTHREMYS Leidy. Posterior nares separating vomer from o. o. palatina; premaxillary margin concave, involute; alveolar surface profoundly concave, vomerine surface a sulcus. Nasal meatus floored in front.

EUCLASTES Cope. Maxillaries and palatines separated throughout by the prolonged vomer; posterior nares opposite palatal front margin of orbits; premaxillary margin projecting, beak-like; alveolar face little concave, vomer forming a central ridge. Floor of nasal meatus perforate for hook of mandible.

While *Bothremys* had an inferior mouth and projecting muzzle, as in the modern *Hydraspides*, the nostrils of the *Euclastes* were superior and behind the short projecting beak. The orbits are not, as in the *Macrochelys* of the Mississippi, far anterior and reduced in size, but their centres are distant from the end of the muzzle (measured axially) more than one-third the total length of the cranium.

The descending portion of the prefrontal is very wide, and equal to the width

* Proc. Academy, 1866, p. 3.

of the maxillary outside the lachrymal foramen; the latter is small. Internally the columns of the prefrontals converge below to nearly an acute angle, and are directed forwards along the vomer. They restrict the nasal meatus extensively, leaving its diameter less than that of the columns. On the muzzle the prefrontals have but a short common suture, admitting the frontal far between them. The internal nostrils have a diameter each side the septum, equal to that of the meatus between the prefrontals.

EUCLASTES PLATYOPS Cope.

Premaxillaries narrow, rounded in front, maxillary outline nearly straight to below anterior rim of orbits, where the breadth of the muzzle is four inches, length to end of muzzle only two. Plane from top of prefrontals to maxillary margin straight, oblique. Maxillary margin with a gentle sigmoid flexure. Squamosal much expanded below and behind orbits. Frontal region flat, parietal rising behind. Nasal meatus subquadrate, slightly narrowed below, its palatal foramen with a free lateral osseous margin. Alveolar ridge divergent, little projecting above the oblique surface; the latter is most concave behind on each side the vomer, and presents no ridges, and few nutritious foramina. Line of common suture of o. o. maxillaria in front of vomer, in a sulcus. Palatines cuneiform with everted margins posteriorly, latter most elevated on each side the small choanal opening, which is bounded in front by the projecting posterior knob of the vomer. The maxillaries are very massive, and underlie more than two-thirds the area of the orbits; they receive a very extensive descending portion of the prefrontals, their union extending so far towards the median line as to leave but a narrow nasal meatus. This offers a powerful resistant face to the motion of the mandible. The posterior, orbital margin is .75 inch in thickness, and is at right angles to its alveolar margin. Pterygoids almost entirely broken away. The following measurements will furnish the best data for a comprehension of the form in detail:

	In.	Lin.
Total length cranium.....	11	
Breadth behind orbits.....	8	6
“ between posterior margins orbits.....	5	2.5
Least interorbital width.....	2	2.5
Width of nasal meatus.....	1	2.5
Depth premaxillaries.....	1	1
“ maxillary at middle orbit.....	1	3.5
“ squamosal at zygomatic arch.....	2	2
Length naso-prefrontals.....	2	3
“ “ common suture.....		6.2
“ common suture frontals.....	2	4
“ from anterior margin orbit to nasal meatus.....		11
“ from premaxillary margin to end vomer.....	3	9
Width posterior nares together.....	1	1.5
“ palatine bone opposite end of vomer.....		9
“ vomer near anterior extremity.....		7
Greatest diameter of orbit.....	2	6
Least “ “	2	2

The broad, regular alveolar surfaces have no doubt supported a massive corneous table, in some degree like that of *Platypeltis ferrox*, and with little or no external cutting margin. This arrangement, as well as the compactness of structure, is appropriate to a nutrition dependent on crushing more or less hard bodies, as molluscs. That the *Ostreæ*, *Terebratulæ*, etc., of the sea coasts or estuaries in which it lived formed much of its food, is therefore quite probable.

Estimating the proportions to have been similar to those of *Hydraspis maximiliani*, the dimensions of the *Euclastes platyops* were—

1867.]

	Ft.	In.
Length from end muzzle to end tail.....	6	7 $\frac{3}{4}$
“ of carapace	4	7
Width of plastron at middle.....	3	0 $\frac{3}{4}$

Note on Dioicæus forms of *VITIS VINIFERA*, L.

BY THOMAS MEEHAN.

The different species of *Vitis* are so closely allied that the systematist is often puzzled to find distinguishing characters, and hence liable to give too much importance to points really of little value.

De Candolle, in his *Prodromus*, divides *Vitis* into two sections, according to the inflorescence,—one, natives of this country, with imperfect flower (*Dioicæ aut polygamæ, Americanæ*); the other, perfect and Old-world forms (*Hermaphroditæ, in orbe veteri indigenæ*),—but as *Vitis* is not of a true declinuous type, but of that class which suppresses or develops its sexual organs according to circumstances, such a division is at best of doubtful value.

Vitis vinifera, the great type of Asiatic forms, has not probably been observed closely in a natural state; and under cultivation, in the hands of cultivators who value the vine for its fruit only, barren plants would not likely be preserved. Yet pistillate or female plants do not seem uncommon, for De Candolle says (vol. i. p. 633,) “*Seminibus numero variis imo interdum omnibus abortivis*,” these seedless grapes being most likely the product of unimpregnated ovaries.

That male plants do exist is, however, proved by a specimen, in the Academy's Herbarium, of *Vitis vinifera mascula*, gathered near Naples by Tenore.

In the endeavor to distinguish forms of *Vitis vinifera* from American species, its hermaphrodite character is still often insisted on; but with the demonstration of the existence certainly of male flowers, and the probable existence of female ones, this distinction becomes too uncertain to be of much value.

Descriptions of new species of Texan MYRIAPODA.

BY DR. HORATIO C. WOOD, JR.

Genus CERMATIA.

C. LINCEI.

C. dilute brunnea, linea mediana saturate viride et alteris lateralibus interdum obsoletis ornata; stomatis dorsalibus singula maculis duis laete rubris marginata.

This handsome species is of a brownish color, with the dark green median stripe often involving nearly the whole of the posterior portion of the dorsum. The lateral stripes appear to be sometimes wanting. The head is marked much as in *C. forceps*; in the dried specimen it is of a nearly uniform reddish ferruginous color. The scuta are roughened with rather distant small spines; their margins are thin, elevated, without conspicuous spines. The antennæ are of the same color as the head, as indeed are all of its appendages. The spots bordering the dorsal stomata are somewhat kidney-shaped, and of a scarlet lake color.

The under surface of the body, the coxæ and femora, are of a light brown color. The tibiæ and tarsi are of a dark greenish tint. The metatarsi are of nearly the same tint as the head; the first article is about equal to the next five in length. The sterna are rather deeply impressed with a median longitudinal line. The body of the largest specimen in my possession is about seven lines in length.

The foregoing description is taken chiefly from dried specimens, in which the coloration, I presume, does not differ materially from that of life.

[April,